

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~striketrough~~. When strikethrough cannot easily be perceived, or when five or fewer characters are deleted, [[double brackets]] are used to show the deletion. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered). Please CANCEL claims 1-3, and ADD new claims 4-10 in accordance with the following:

Claims 1-3 (Cancelled)

4. (New) A method of creating a defocused image from an input image, comprising the steps of:

- (a) receiving an input image including a plurality of pixel data;
- (b) selecting one pixel data from said plurality of pixel data;
- (c) converting said selected pixel data from a predetermined scale to a linear scale to generate light data having some light amount;
- (d) allocating said light data to pixels surrounded by an aperture which has a predetermined shape to generate a defocused disk image having a set of allocated light data so that each of said set of allocated light data is substantially equal to each other and a total light amount of said defocused disk image becomes equal to the light amount of said light data; and
- (e) repeating the steps (b) through (d) for all pixel data included in said input image to create a defocused image.

5. (New) The method according to claim 4, further comprising the step of converting a scale of said defocused disk image back to said predetermined scale.

6. (New) The method according to claim 4, further comprising the steps of:
determining whether said input image is represented in said linear scale, pixel data of said input image having light data having some light amount; and
skipping the step (b) if said input image is already represented in linear scale.

7. (New) The method according to claim 4, further comprising the step of determining said size of said defocused disk image based on distance information of said selected pixel data,

wherein said light data is allocated to pixels surrounded by an aperture which has a predetermined shape to generate said defocused disk image based on said size of said defocused disk image in the step of allocating light data.

8. (New) A method of creating a defocused image from an input image, comprising the steps of:

- AD ONLY
- (a) receiving an input image including a plurality of pixel data;
 - (b) selecting one pixel data from said plurality of pixel data;
 - (c) converting said selected pixel data from a predetermined scale to a linear scale to generate light data having some light amount;
 - (d) determining a size of a defocused disk image based on distance information of said selected pixel data;
 - (e) allocating, based on said size of said defocused disk image, said light data to pixels surrounded by an aperture which has a predetermined shape to generate said defocused disk image so that a total light amount of said defocused disk image becomes equal to the light amount of said light data; and
 - (f) repeating the steps (b) through (e) for all pixel data included in said input image to create a defocused image.

9. (New) A computer program product for creating a defocused image from an input image, comprising:

- (a) program code to receive an input image including a plurality of pixel data;
- (b) program code to select one pixel data from said plurality of pixel data;
- (c) program code to convert said selected pixel data from a predetermined scale to a linear scale to generate light data having some light amount;
- (d) program code to allocate said light data over pixels surrounded by an aperture which has a predetermined shape to generate a defocused disk image having a set of allocated light

data so that each of said set of allocated light data is substantially equal to each other and a total light amount of said defocused disk image becomes equal to the light amount of said light data; and

(e) program code to repeat the processes of program code (b) through (d) for all pixel data included in said input image to create a defocused image.

10. (New) A computer program product for creating a defocused image from an input image, comprising:

(a) program code to receive an input image including a plurality of pixel data;

(b) program code to select one pixel data from said plurality of pixel data;

(c) program code to convert said selected pixel data from a predetermined scale to a linear scale to generate light data having some light amount;

(d) program code to determine a size of a defocused disk image based on distance information of said selected pixel data;

(e) program code to allocate, based on said size of said defocused disk image, said light data to pixels surrounded by an aperture which has a predetermined shape to generate said defocused disk image so that a total light amount of said defocused disk image becomes equal to the light amount of said light data; and

(f) program code to repeat the processes of program code (b) through (e) for all pixel data included in said input image to create a defocused image.
